

What is claimed is:

1. A system for publishing images over a communication network, comprising:  
a study storage device for storing a plurality of studies, each study comprising one or more images;  
a publication server coupled to said communications network, said publication server adapted to enter an automatic mode wherein one or more studies are automatically sent to a client computer coupled to said communications network as they become available on said study storage device;  
said client computer adapted to receive said one or more studies and store them in a local storage; and  
said client computer comprising means for a user to enter an interactive mode wherein a viewing session is initiated for viewing a selected study before transmission of said selected study is complete, wherein data for viewing said selected study is obtained from said publication server using progressive image streaming techniques and from data already received and stored in said local storage.
2. The system according to claim 1, wherein said publication server is adapted to send one or more studies to said client computer in accordance with a set of publication rules.
3. The system according to claim 2, wherein said publication rules comprises instructions for determining, for each new study, which clients are to receive it.
4. The system according to claim 1, wherein said client computer comprises means for using only data stored in said local storage if a user initiates a viewing session of said selected study after all data for said selected study is completely received.
5. The system according to claim 1, wherein said client computer comprises means for using progressive image streaming techniques to retrieve data from said publication server for said selected study if a user initiates a viewing session of said selected study before any data corresponding thereto has been received by said client computer.
6. The system according to claim 1, wherein said client computer comprises data pull means adapted to periodically poll said publication server for new studies that have not yet been retrieved.

7. The system according to claim 1, wherein said client computer comprises data push means adapted to configure said publication server to automatically check for and send new studies that have not yet been transmitted to said client.
8. The system according to claim 1, wherein said publication server is adapted to send said one or more studies to said client using progressive image streaming techniques whereby information is sent in encoded layers of increasing accuracy and quality.
9. The system according to claim 1, wherein said client computer comprises means whereby if said user initiates a viewing session of said selected study after data is completely received by said client, then said client utilizes said data to provide instant rendering of images within said selected study.
10. The system according to claim 1, further comprising means for permitting said user to freely switch back and forth between automatic mode and interactive mode without the need to switch protocols.
11. The system according to claim 1, wherein said progressive image streaming techniques are performed utilizing JPEG2000 standard.
12. An image publication system for use on a client computer coupled to a communications network, comprising:
  - first means for receiving a first command from a user to enter an automatic mode whereby new studies are sent immediately from said publication server to said client computer over said communications network as they become available;
  - local storage device for storing said studies upon receipt;
  - second means for receiving said studies and for storing them in said local storage;
  - third means for receiving a second command from said user to view a selected study before data is completely received for said selected study and in response thereto, entering an interactive mode whereby an attempt is made to obtain data required for viewing said selected study from said local storage, and if unsuccessful, from said publication server using progressive image streaming techniques via one or more requests transmitted from said client computer to said publication server; and
  - fourth means for receiving and decoding data received from said publication server in response to said one or more requests.

13. The system according to claim 12, wherein said publication server is adapted to send one or more studies to said client computer in accordance with a set of publication rules.
14. The system according to claim 12, wherein said publication server is adapted to send one or more studies while in said first mode using progressive image streaming techniques.
15. The system according to claim 12, wherein said client computer comprises means for using only data stored in said local storage if a user initiates a viewing session of said selected study after all data for said selected study is completely received.
16. The system according to claim 12, wherein said client computer comprises means for using progressive image streaming techniques to retrieve data from said publication server for said selected study if a user initiates a viewing session of said selected study before any data corresponding thereto has been received by said client computer.
17. The system according to claim 12, wherein said client computer comprises data pull means adapted to periodically poll said publication server for new studies that have not yet been retrieved.
18. The system according to claim 12, wherein said client computer comprises data push means adapted to configure said publication server to automatically check for and send new studies that have not yet been transmitted to said client.
19. The system according to claim 12, wherein said publication server is adapted to send said one or more studies to said client using progressive image streaming techniques whereby information is sent in encoded layers of increasing accuracy and quality.
20. The system according to claim 12, wherein said client computer comprises means whereby if said user initiates a viewing session of said selected study after data is completely received by said client, then said client utilizes said data to provide instant rendering of images within said selected study.
21. The system according to claim 12, further comprising means for permitting said user to freely switch back and forth between automatic mode and interactive mode without the need to switch protocols.
22. The system according to claim 12, wherein said progressive image streaming techniques are performed utilizing JPEG2000 standard.

23. An image publication system for use on a publication server computer coupled to a communications network, comprising:

first means for receiving instructions from a client computer coupled to said communications network, said first means for configuring said publication server computer to automatically send new studies to said client computer as said studies become available;

second means for receiving requests for specific layers of accuracy for regions of interest of a study selected by a user for viewing on said client computer before transmission of data for said selected study is complete; and

third means for sending said specific layers of accuracy for regions of interest of said selected study to said client computer in response to said requests.

24. The system according to claim 23, wherein said publication server computer is adapted to send said one or more studies to said client computer using progressive image streaming techniques whereby information is sent in encoded layers of increasing accuracy and quality.

25. The system according to claim 24, wherein said progressive image streaming techniques are performed utilizing JPEG2000 standard.

26. The system according to claim 23, wherein said publication server computer is adapted to send one or more studies to said client computer in accordance with a set of publication rules.

27. A computer program product for use in a client computer coupled to a communication network, said computer program product comprising:

a computer readable medium having computer readable program code means embodied in said medium for receiving and displaying studies from a publication server coupled to said communications network, said computer program product comprising:

computer readable program code means for receiving a first command from a user to enter an automatic mode whereby new studies are sent immediately from said publication server to said client computer over said communications network as they become available;

computer readable program code means for receiving said studies and for storing them in a local storage device coupled to said client computer;

computer readable program code means for receiving a second command from said user to view a selected study before its data is completely received and in response thereto,

entering an interactive mode whereby data required for viewing said selected study is first obtained from said local storage, and if unsuccessful, from said publication server using progressive image streaming techniques via one or more requests transmitted from said client computer to said publication server; and  
computer readable program code means for receiving and decoding data received from said publication server in response to said one or more requests.

28. A computer program product for use in a publication server computer coupled to a communication network, said computer program product comprising:

a computer readable medium having computer readable program code means embodied in said medium for publishing studies to a client computer coupled to said communications network, said computer program product comprising:

computer readable program code means for receiving instructions from said client computer and for configuring said publication server computer to automatically send new studies to said client computer as said studies become available on a study database coupled to said publication server computer;

computer readable program code means for receiving requests for specific layers of accuracy for regions of interest of a study selected by a user for viewing on said client computer before transmission of data for said selected study is complete; and

computer readable program code means for sending said specific layers of accuracy for regions of interest of said selected study to said client computer in response to said requests.